

Amendments in the Specification:

Please replace the paragraph starting on page 5 under the heading “BRIEF DESCRIPTION OF THE DRAWINGS” with the following amended paragraph:

FIG. 1 shows a preferred embodiment of the present invention.

FIG. 2 shows a micro-well plate.

FIG. 3 shows a top view of the fixture plate.

FIGS. 4 and 5 show top views of micro-well plates on the fixture plate.

FIG. 6 shows a block diagram of a preferred embodiment of the present invention.

FIG. 7 shows a preferred monitor.

FIGS. 8 – 10 and 18 – 25 show steps in the sequence of operations of a preferred embodiment of the present invention.

FIG. 11 shows hanging drops of liquid in a micro-well plate.

FIG. 12 shows an example of aqueous drop in oil protein crystallization.

FIG. 13 shows a top view of a micro-well plate on the fixture plate.

FIG. 14 shows a side view of the light source shining upwards onto a micro-well plate.

FIG. 15 shows a magnified view of two wells of a micro-well plate, wherein each well has a drop of liquid.

FIGS. 16 and 17 show a detail view of the drops of liquid shown in FIG. 15.

FIG. 26 shows a preferred monitor screen after a run has been completed.

FIGS. 27 and 28 show details of other preferred monitor screens.

FIG. 29 shows a hanging drop of liquid with crystal growth.

FIG. 30 shows a preferred embodiment of the present invention.

FIG. 31 shows a flowchart of an auto-focus subroutine of the present invention.

FIG. 32. shows a flowchart of a focus value subroutine.

FIG. 33 shows a flowchart of the auto score and classify subroutine.

FIGS. 34a – 34d show flowcharts of the classify subroutine.

FIG. 35a – 35b show the sub-classification of the crystal class.

FIG. 36 shows the main program flow.

FIG. 37 illustrates a side view illustrating dual filters in the light path.

FIG. 38 illustrates a top view of the drive mechanism for the rotatable linear polarized filter.

FIG. 39 illustrates a top view of a second filter wheel.

FIG. 40 shows the connectivity of another preferred embodiment.

FIGS. 41A and 41B shows another preferred embodiment of the present invention.

FIG. 42 shows the top view of a preferred tray.

FIG. 43 shows a preferred work cell area.

FIG. 44 shows a block diagram of a preferred embodiment of the present invention.

FIGS. 45 – 77 show a sequence of operation of a preferred embodiment of the present invention.

FIG. 78 shows a perspective view of a preferred tray.

FIG. 79 shows another view of the tray of FIG. 78.

FIG. 80 shows another view of the tray of FIG. 78.

FIG. 81 shows another view of the tray of FIG. 78.

FIG. 82 shows another view of the tray of FIG. 78.

FIG. 83 shows another preferred embodiment of the present invention.

FIG. 84 shows a simplified perspective view of a preferred proteomic crystal verification and inspection system.

FIG. 85a shows a detailed perspective view of a preferred proteomic crystal verification and inspection system.

FIG. 85b shows a detailed perspective view of a preferred indexer.

FIGS. 86 – 90 illustrate a preferred sequence of operations of the preferred proteomic crystal verification and inspection system shown in FIGS. 83 – 85b.

FIGS. 91—92 91 – 94 show a preferred stand by station.